

10/553721

JC20 Rec'd PCT/GB 17 OCT 2004

International application No.  
PCT/GB2004/001685**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY****Box No. IV Lack of unity of invention**

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☐ paid additional fees.
  - ☐ paid additional fees under protest.
  - ☒ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☐ complied with
  - ☒ not complied with for the following reasons:  
**see separate sheet**
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☐ all parts.
  - ☒ the parts relating to claims Nos. 1-4, 10, 12-19, 24, 30, 32-37

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

Novelty (N)	Yes: Claims	3,4,12-13,18-19, 24,30,33
	No: Claims	1-2, 10, 14-17,32,34-37
Inventive step (IS)	Yes: Claims	
	No: Claims	1-4, 10, 12-19, 24, 30, 32-37
Industrial applicability (IA)	Yes: Claims	1-4, 10, 12-19, 24, 30, 32-37
	No: Claims	

## 2. Citations and explanations

**see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

30/553721  
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International application No.

PCT/GB2004/001685

The International Searching Authority considers that the present application contains **six** potential inventions. This observation is based on the following reasons:

The prior art has been identified as WO 01/77815 A (TRANCEIVE TECHNOLOGIES INC) 18 October 2001.

This document is taken into account, because referring to the wording of **claim 1** it discloses a data access and communications system (figures 5 and 7) comprising:

- a software application that is distributed across a terminal-side component running on a terminal and a server-side component (page 1, lines 32-35);
- in which the terminal-side component and the server-side component
  - (i) together constitute a client to a server (page 1, lines 29-30; page 8, line 32 - page 9, line 4) and
  - (ii) collaborate by sending messages using a message queuing system over a network (page 19, lines 21-23 and 26-28).

In view of this prior art the claim 1 and herewith the common concept of a claimed protection is not new ( Rule 13 (1) and (2) of the PCT). The problems underlying the application must be redefined following Administrative Instructions under PCT, Annex B, Part 1, paragraph (c)(ii).

1. From the comparison the following technical features of **claims 1-4, 10, 12-19, 24, 30 and 32-37** (1st. potential invention) can be seen to make a contribution over this prior art (Special Technical Features as defined in Rule 13(2) PCT):
  - the terminal-side component insulates a terminal program from being affected if the connection over the network is broken by also queuing messages in readiness for the connection to be re-established, enabling the terminal program to proceed to its next task.From these Special Technical Features the objective problem to be solved by this potential invention can be seen in necessity for providing a high level of resilience in the message transmission process (see description, page 18, lines 18-19).
2. From the comparison of **claims 5-9 and 11** the following special technical feature can be seen to make a contribution over this same prior art:

each message that is queued defines part or all of an event, in which an event describes a change to the data stored at either the terminal or server in enough detail to enable data replication to take place without the need for a synchronisation engine; data replication being achieved by sending events rather than a complete dataset (or sub-sets of a dataset) of stored data for synchronisation.

From these the objective problem to be solved can be seen in:  
download of entire dataset for synchronisation is long and costly, there is the necessity for sending less data - only dataset changes (see description, page 21, lines 16-25).

3. From the comparison of **claims 20-23** the following special technical feature can be seen to make a contribution over this same prior art:  
the terminal-side component monitors available memory on the terminal and automatically deletes data stored on the terminal that meets pre-defined criteria of age and/or use and/or size without affecting the corresponding data stored on the terminal.

From these the objective problem to be solved can be seen in:  
demand for conserving memory on the client device (see description, page 15, lines 18-19).

4. From the comparison of **claim 25** the following technical features can be seen to make a contribution over this same prior art:  
the terminal-side component enables a user to  
(a) select a release option to delete a message stored on the terminal but not the corresponding message stored on the server and also to (b) select a delete option to delete a message stored on the terminal and also the corresponding message on the server, the release and delete options appearing at the same level in a menu hierarchy displayed on the terminal.

From these the objective problem to be solved can be seen in:  
need for making allowance for user's desire to free up memory on the device and yet preserve the data on the server (see description, page 17, lines 14-16).

5. From the comparison of **claims 26-29** the following technical features can be seen to make a contribution over this same prior art:  
the application enables the correct routing of messages addressed to a

terminal identified by an ID by mapping that ID to the actual IP address needed to reach the terminal.

From these the objective problem to be solved can be seen in:  
demand for enabling the correct routing of messages.

6. From the comparison of **claim 31** the following technical features can be seen to make a contribution over this same prior art:

the terminal component sends a challenge to any third party suspected of attempting a denial of service attack on the terminal and that denial of service attack does not then lead to any additional data traffic to the terminal.

From these the objective problem to be solved can be seen in:  
demand for more security .

The above analysis shows that the Special Technical Features of the **six** claimed inventions are not same or similar to each other. A comparison of the objective problems underlying the subjects of the **six** claimed inventions, seen in the light of the description and the drawings of the present application, indicates that there is no technical correspondence between these problems nor they show any corresponding technical effect. In conclusion, therefore the **six** groups of claims are not linked by a single general inventive concept. The application hence does not meet the requirements of unity of invention as defined in Rule 13 (1) and (2) of the PCT.

II

1. The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: WO 01/77815 A (TRANSCIVE TECHNOLOGIES INC) 18 October 2001  
(2001-10-18)

D2: WO 97/46939 A (NEW ERA OF NETWORKS INC) 11 December 1997  
(1997-12-11)

D3: GLOMOP GROUP: "GloMop: Global Mobile Computing By Proxy" GLOMOP,  
13 September 1995 (1995-09-13), XP002094009

2. The present application does not meet the requirements of Articles 33(1)-(2) PCT, because the subject-matter of **independent claims 1, 34, 36 and 37 is not new.**

- 2.1 Referring to the wording of **claim 1** document D1 discloses a data access and communications system (figures 5 and 7) comprising:
  - a software application that is distributed across a terminal-side component running on a terminal and a server-side component (page 1, lines 32-35); in which the terminal-side component and the server-side component
    - (i) together constitute a client to a server (page 1, lines 29-30; page 8, line 32 - page 9, line 4) and
    - (ii) collaborate by sending messages using a message queuing system over a network (page 19, lines 21-23 and 26-28).

Therefore the claim 1 is not new.

- 2.2 Independent **claim 34** contain the same features as a system of claim 1 expressed respectively in terms of method. The argumentation of the point 2.1 applies also for this claim.

- 2.3 As a matter of fact the independent **claims 36 and 37** are dependent on claim 1- they are based on the features of claim 1. The subject-matter of these claims is therefore not new, see point 2.1

- 3.1 The additional subject matter of **dependent claims 3-4 and 12-13** is not inventive. Difference between the system of the document D1 and the system of these claims is that the terminal-side component insulates a terminal program from

being affected if the connection over the network is broken by also queuing messages in readiness for the connection to be re-established, enabling the terminal program to proceed to its next task.

The objective problem to be solved by these features can be seen in necessity for providing a high level of resilience in the message transmission process (see description, page 18, lines 18-19).

The proposed solution of these claims cannot be considered as involving an inventive step (Article 33(3) PCT) because it is already disclosed in document D2 (page 14, lines 10-15; page 32, line 25 -page 33, line 6).

- 3.2 The additional subject matter of **dependent claim 24** is not inventive. Difference between the system of the document D1 and the system of these claims is that the terminal-side component enables a document attachment to be sent to the wireless terminal in either the original format in which the document is stored at the server or in a more useable format converted from the original format. The objective problem to be solved by these features can be seen in necessity for distillation of data. (see description, page 18, lines 18-19).

The proposed solution of these claims cannot be considered as involving an inventive step (Article 33(3) PCT) because it is already disclosed in document D3 (paragraph 1.3).

- 3.3 **Dependent claims 2, 10, 14-19, 30, 32-33 and 35** contain only additional features which are already known from document D1 or are not inventive and do not meet requirements of Articles 33(1) and (3) PCT. The additional subject matter of these claims contains only implementation details within the scope of the customary practice followed by persons skilled in the art or are disclosed in document D1, see also references in Search Report.